Healthy Sleep – Healthy Teeth

How establishing excellent sleep routines during infancy has the serendipitous outcome of excellent oral hygiene for toddlers and children

Pete Pellegrino, MD, FAAP
Princeton Nassau Pediatrics, PA

Learning Objectives

• Sleep needs by age
• Establishing good sleep routines
• Effective sleep strategies
• Sleep safety
• Tooth eruption pattern/timing
• Pathogenesis of tooth decay
• Establishing tooth brushing
• Maintaining healthy oral hygiene

Recommended Sleep Times

• 4-12 months 12-16 hours (including nap)
• 1-2 years 11-14 hours (including nap)
• 3-5 years 10-13 hours (including nap)
• 6-12 years 9-12 hours
• 13-18 years 8-10 hours
Goal

• 8 hours of continuous sleep by 4 months

• Preview: average age of first tooth eruption is 6-10 months

Three Rules

• 1: Between 1-2 months of age: Infants start to learn to fall asleep on their back, **ON THEIR OWN**, in a safe setting

• 2: Infants sleep in their own crib

• 3: Infants sleep in their own room (or at least out of sight/smell from parents)

“On Their Own”

• NOT feeding to sleep
  – Daytime naps
  – Especially nightly “bed time”

• NOT being rocked or held

• “Pavlov Dog” classical conditioning

• Overnight awakenings
You can’t expect your infant to go back to sleep on his own in the middle of the night if he doesn’t fall asleep on his own at the start of the night.

“Own Crib”

• Firm surface
• No objects (pillows, blankets, bumpers)
• Reduce the risk of SIDS

**Remember: All infants should be placed on their BACK to go to sleep.

“Own Room”

• Or at least a separate area
• Establishing habits
• Infant not looking for mom to breast feed
• Mom/Dad slower to address every fuss
• Independence
AAP Policy October ‘16

• Infants should sleep in the same room but NOT the same surface for 6-12 months
• Actual concern: sleeping in bed with mom increases the risk of SIDS (soft mattress, pillows, etc.)
• Theory was that mothers who were breast feeding overnight would be more likely to put the child down in a safe sleeping surface like a bassinet if it was convenient

Penn State Study June ‘17

• Babies who share a room with their parents:
  – 4X more likely to end up in parents’ bed
  – 2X more likely to have unsafe object in crib
• Worse sleep for infant and parents


Penn State Study June ‘17

• Independent sleepers:
  – 4 months: average 45 min more of continuous sleep
  – 9 months: those who were independent by 4 months, average 1 hour and 40 minutes longer stretches
• 30 months: independent sleepers (by 4 months) slept an average of 45 min longer than those co-rooming at 9 months

Room Sharing ???

• NOT safer
• Much less effective for sleep habits
• Worse parental sleep also

Inadequate Infant Sleep

• Emotional regulation
• Mood
• Behavior
• Poor sleep later in childhood

Parental Sleep

• Happiness
• Happiness with parenting
• Healthier attitude towards children
• Relationship quality
• Work/life stress
• Health
Review

- Not feeding to sleep
  - For naps
  - At bedtime
- No overnight feeds by 4-6 months
- Teaching infant to self soothe

Tooth Eruption

Pathogenesis of Tooth Decay

- Bacteria in mouth
- Bacteria digest sugars and produce acids
- Acid breaks down the minerals in teeth leading to cavities
- Trying to eliminate “acid attacks” on teeth
Pathogenesis of Tooth Decay

• “Acid Attacks”
• Continuously nursing/bottle feeding
  – No bottles after 1st birthday
• Frequent snacking
• Sticky foods

Figure 6. Schematic representation of the changes in plaque pH in an individual when: (A) has frequent food and drink intake during the day; or (B) limits their food and drink intake to main meals only. The critical pH is 5.5, below which tooth begins to demineralizes.

“Bottle Rot”
Tooth Decay

• THE MOST COMMON CHILDHOOD DISEASE
• Affects 50% of 1st graders
• Affects 80% of 17 year olds

Tooth Decay

• Pain
• Missed school
• Parents missed work
• Drillings, fillings, restorative procedures
• Anesthesia
• Cost $$$

Establishing Healthy Oral Hygiene

• By 6 months of age: (first tooth 6-10 months)
  – No overnight feeds (breast or bottle)
  – No comfort feeding (daytime or overnight)
• Brushing teeth after the last feed
  – Hard to do if you have always “fed to sleep”
  – Easy to implement if you followed Rule #1:
    Teaching your child how to fall asleep on her own
Establishing Tooth Brushing

- Parent question: “When should I start brushing my baby’s teeth?”
- AS SOON AS THE FIRST TOOTH ERUPTS!

How To Brush

- Under age 3 years*: Water and soft bristled tooth brush (smear of fluoridated toothpaste)
- Older than age 3 years: Pea sized amount of fluoridated toothpaste
- Brush all surfaces of teeth (and tongue) with a circular motion for 1-2 minutes – depending on how many teeth are present

*Depending on child’s risk and water source. Discuss with your dentist/pediatrician

AAP Clinical Report August 2014: Fluoride Use in Caries Prevention in the Primary Care Setting
My child “won’t let me” brush her teeth
• Kids also don’t like to put on diapers . . . but they don’t have a choice, right?

Flossing
• Floss between any teeth that touch
• Areas where tooth brushes can’t reach

Putting It All Together

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<tr>
<th>Healthy Sleep</th>
<th>Healthy Teeth</th>
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<tr>
<td>• Not feeding to sleep</td>
<td>• Brush teeth twice/day, especially before bed</td>
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<tr>
<td>• Falling asleep on their own</td>
<td>• Easy to implement night time tooth brushing</td>
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<tr>
<td>• Establish meal times</td>
<td>• Avoid repeated “acid attacks” throughout the day and overnight</td>
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<tr>
<td>• Sleeping through the night</td>
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Patient Experience

• Megan
  – Mother of Leo (age 8) and Penelope (age 4)
  – Pregnant with baby #3

The End – Thank You

The Pellegrinos